IDR RID Report

Date Last Modified 1/25/96
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Document RMA Presentation

RID ID IDR 37
Review IDR
Originator Ref
Priority 2

Section **Page** **Figure Table**

Category Name External Interfaces **Actionee** Project (Ackerson)
Sub Category
Subject RMA Analysis for L7/LPS to ECS/LPDAAC Data Ingest

Description of Problem or Suggestion:

The presentation states that EBnet is not a part of ECS RMA! From the Landsat 7 point of view, L7 data is released to ECS, but now EBnet seems to be between LPS and LPDAAC. This is a very uncomfortable issue for L7, because of the L7 requirement to transfer data to ECS/LPDAAC in 8 hours. Is ECS now saying that this interface is not their problem?

Originator's Recommendation

1) Don't put the burden of availability of the data path from L7 to LPDAAC onto another separate element. From L7's viewpoint, this is the heart of making L7 data available to users, and needs to be available as required.

2) Inform L7 by CDR what the availability of this data path is, as a part of ECS and a part of the ECS responsibility.

GSFC Response by: Ted Ackerson **GSFC Response Date** 12/7/95

EBnet is required to provide the interface equipment between the Landsat 7 Processing System (LPS) and the ECS. EBnet has been given three requirements in relation to this interface and the RMA and backup equipment they are required to provide will assure that the ECS 8 hour to ingest LPS data will be met. The requirements are as follows:

REQID EB4110 EBnet shall provide the interface equipment between the Landsat 7 Processing System (LPS) and the ECS, and provide switchable backup.

h. REQID EB2276: The EBnet support for the interface between the Landsat Processing System (LPS) and the EOSDIS Core System (ECS) shall have an operational availability of 0.999 at a minimum and an MDT of two (2) hours or less.

h. REQID EB2276: EBnet shall provide a backup to the interface between the Landsat Processing System (LPS) and the EOSDIS Core System (ECS) with a switchover time of 15 minutes or less from the primary interface to a backup capability.

ECS will transfer, ingest and archive all approved file groups for a single DAN within 8 hours, accounting for any downtime which is consistent with the ECS RMA requirements.

The down time for EBnet should not exceed the expected down time of the ECS requirements. Therefore given an EBnet failure consistent with the ECS requirements, ECS should still meet the transfer time of 8 hours. Obviously where EBnet does not meet these requirements, ECS will not be held to blame. It is also recognized that in the case of cascading failure (ECS fails for max down time then EBnet fails) that the combined failures would be outside the RMA and switchover times of ECS and the 8 hour requirement could be exceeded without fault or blame to ECS.

ECS should meet the 8-hour requirement with a failure in any of the end-to-end systems as long as the failure is not grater than a failure that ECS could accept internally with the exception that ECS can obviously not be held accountable for cascading or multiple failures.

HAIS Response by: B. Harsch **HAIS Schedule** 11/15/95
HAIS R. E. Pete Lyons **HAIS Response Date** 11/22/95

1) Per the ESDIS Requirements Meeting on 11/8/95, ESDIS (T. Ackerson & D. Devito) is creating a new Level 2 requirement which will flow down to EBnet to assure that a failure of the EBnet-provided router interface will not prohibit the ability to transfer, ingest and archive Landsat 7 Level 0R data within 8-hours. (ref. ECS F&PRS EOSD-1085)

Per EBnet (Code 540/C. Garman), the LPS-ECS interface will operate at a reliability higher than what is normally provided to EBnet science users. The EBnet design approach to the LPS-ECS interface is to provide a second, hot standby circuit which will permit restoration of a lost comm link within minutes.

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2) ECS does not include EBnet and has no operational nor programmatic control over an EBnet-provided router. Therefore, ECS RMA does not cover the EBnet-provided router.

Status **Closed** **Date Closed** **1/25/96** **Sponsor** **Herring**

****** **Attachment if any** ******